

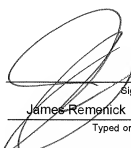
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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 8125.002.USCN	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on _____ Signature _____ Typed or printed name _____		Application Number 09/894,879	Filed June 29, 2001
		First Named Inventor Paul J. Glatkowski	
		Art Unit 1714	Examiner Yoon, Tae H.
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>			
<p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>36,902</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>		<p> Signature James Remorick Typed or printed name <u>202-659-0100</u> Telephone number August 2, 2007 Date</p>	
<p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>			
<p><input type="checkbox"/> *Total of _____ forms are submitted.</p>			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : Group Art Unit: 1714
Paul J. Glatkowski et al. :
App. No.: 09/894,879 : Examiner: Tae H. Yoon
Filed: June 29, 2001 : Confirmation No. 4705
Title: ELECTROMAGNETIC SHIELDING COMPOSITE COMPRISING CARBON NANOTUBES

Commissioner for Patents
U.S. Patent and Trademark Office
P.O. Box 1450; Alexandria, VA 22313-1450

Dear Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant respectfully requests the United States Patent and Trademark Office (“PTO”) to review the rejections set forth in the final Office Action, mail dated March 2, 2007.

I. Remarks Regarding 35 U.S.C. § 112, Second Paragraph.

A. Claims 23-49, 52-54 and 76-122 stand rejected, under 35 U.S.C. § 112, second paragraph, as allegedly containing new matter. Specifically, the Examiner asserts that the claimed shielding effectiveness added to these claims relates to plane wave shielding and not to magnetic wave shielding. Applicant respectfully disagrees.

Plane wave shielding and magnetic wave shielding are closely related properties of shielding. The terms “plane wave” and “magnetic wave” refer to testing parameters, not to any distinction having to do with the presence or absence of enhanced shielding. As is shown in Table I, Applicant’s claimed invention exhibits both types of shielding. If the Examiner believes that there is a relevant distinction between the two shielding tests as they apply to the materials of the claimed invention, Applicant respectfully request that an Examiner’s Affidavit be placed into the record to afford Applicant an opportunity to respond to the rejection. In fact, the Examiner provided no explanation at all. Absent such an affidavit or any explanation, this rejection cannot stand.

Applicant also respectfully asserts that the invention, as recited in the claims, is fully supported by the specification as understood by one of ordinary skill in the art. The parameters of the testing make clear the recited limitations which include the 10db. No further support is required or necessary.

Further, the Examiner asserts that aspects of claim 42 are not supported, namely, the phrases “carbon nanotubes that are not in contact with each other, other than along their longitudinal areas” and “are not aligned or oriented to provide electromagnetic shielding.” Applicant respectfully disagrees.

Applicant respectfully notes that support for these phrases is replete throughout the application. Even a cursory review would have revealed that support for the exact phrase “*carbon nanotubes that are not in contact with each other, other than along their longitudinal areas*” can be found at page 2, last paragraph, and page 13, third paragraph. Support for the phrase “are not aligned or oriented to provide electromagnetic shielding” can also be found throughout the application in that Applicant states that alignment or orientation provides electromagnetic shielding (see specification at least at page 2, last paragraph; page 3, second and third paragraphs; page 4, fifth paragraph, which provides a discussion of aspect ratios and alignment; page 5, last paragraph; page 6, second paragraph; page 13, paragraphs 7, 9 and 12; page 14, paragraphs 5, 6, 9, 10, and 12).

The rejection is clearly in error and Applicant respectfully requests that it be withdrawn.

B. Claims 23-49, 52-54 and 76-103 stand rejected, also under 35 U.S.C. § 112, second paragraph, as allegedly not enabled by the specification. Specifically, the Examiner asserts that, while being enabled for the composite of PET and nanotubes having an enhanced electromagnetic shielding, the specification is not enabling for the recited composites. Applicant respectfully disagrees.

As clearly recited in the specification:

“The polymeric material used in the composites of this invention is not critical. Typically it will be chosen in accordance with structural, strength, design, etc., parameters desirable for a given application. A wide range of polymeric resins, natural or synthetic, is useful.” (See Specification, page 5, first paragraph).

As is clear to those skilled in the art, and clearly explained in the specification, PET is only one example of such a polymeric resin. If the Examiner has a pertinent level of expertise in the field of the invention, Applicant respectfully requests that an Examiner’s Affidavit be provided explaining that expertise and also the basis for this unsupported assertion. Absent an Examiner’s Affidavit or any supportable evidence, Applicant respectfully requests that the assertion be withdrawn.

The rejection of claims 23-49, 52-54 and 76-103 is clearly in error and Applicant respectfully requests that it be withdrawn.

II Remarks Regarding 35 U.S.C. § 102(e) or, in the alternative, 35 U.S.C. § 103(a)

Claims 23-49, 52-54, 76-104 and 108-122 stand rejected, under 35 U.S.C. § 102(e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 6,683,783 (“Smalley”).

In the Office Action, the Examiner states that “the recited enhancement of the recited dB is an inherent property of the article taught by Smalley” (see Office Action, page 4, last paragraph). The Examiner further states that “*Applicant asserts that Smalley et al. failed to disclose or suggest that at least aspect ratio and alignment of carbon nanotubes confers electromagnetic shielding effectiveness and Applicant’s such statement would be partial evidence that Smalley et al teach the instant composition even though Smalley et al is silent as to the electromagnetic shielding effectiveness.*” (see Office Action, page 4, last paragraph). Applicant respectfully disagrees.

Applicant respectfully asserts that the Examiner’s comments recited above make no sense whatsoever. Electromagnetic shielding is not an inherent property of carbon nanotubes. Only through Applicant’s claimed efforts is shielding possible. Applicant stated in prior responses, and here again repeats, that Smalley is silent as to aspect ratio and alignment. That remark can in no way be construed as an admission that carbon nanotubes inherently provide electromagnetic shielding.

Nowhere in Smalley or in the Examiner’s comments is any connection made between electromagnetic shielding and the properties of aspect ratio, orientation or alignment. Nowhere in Smalley are these properties disclosed, discussed or suggested. Applicant respectfully asserts that electromagnetic shielding is not an inherent property of carbon nanotubes, nor is it a “necessary function” of carbon nanotube containing composites. Mere speculation that carbon nanotubes may be used with shielding does not anticipate or suggest the experimentation necessary to form a composite with EMI shielding. Only after deliberate experimentation to achieve the specific combination of aspect ratio, orientation and/or alignment of the carbon nanotubes as claimed can formation of a composite result in EMI shielding and/or low observability.

None of the comments in the Office Action are directed to Applicant’s “claimed” invention. No connection whatsoever is made between orientation, alignment or aspect ratio of the nanotubes themselves with any disclosures in Smalley. The rejection is in error and Applicant respectfully requests that it be withdrawn.

III. Remarks Regarding 35 U.S.C. § 103(a)

Claims 23-49, 52-54, and 76-122 stand rejected, under 35 U.S.C. § 103(a) as allegedly obvious over Smalley in view of U.S. Patent No.5,908,585 (“Shibuta”). As discussed above, Smalley does not suggest Applicant’s claimed invention and for at least this reason the rejection fails. Nevertheless, Applicant notes that Examiner Yoon makes no substantive comments in the instant Office Action regarding Shibuta. The sole comment made by Examiner Yoon is in the Office Action, mail dated June 20, 2006. Therein Examiner Yoon states that “*Shibuta et al teach that the use of carbon nanotubes in shielding electromagnetic waves is well known in the art at col. 2, lines 1-4, and such teaching supports the Examiner’s position in above.*” (see June 20, 2006 Office Action, page 6, top paragraph).

Shibuta discloses a mixture of multi-walled nanotubes and metal oxide powder in order to achieve the disclosed conductivity, which is the function required for shielding. In direct contrast to the Examiner’s comments, Shibuta specifically does not disclose that conductivity, and thus shielding, can be achieved by the use of carbon nanotubes, which is specifically recited by Applicant’s claims. Shibuta achieves the recited conductivity because of the presence of metal (*see* Shibuta, column 4, lines 24-29). This is not Applicant’s invention as recited in the claims.

Further, Shibuta neither discloses nor suggests aligned or oriented carbon nanotubes, which is specifically recited in every independent claim. Neither alignment nor orientation is an inherent property of Shibuta’s carbon fibers. Applicant respectfully asserts that carbon fibers are not naturally produced aligned or oriented, but are normally produced massively entangled. Therefore, the carbon fibers in Shibuta are necessarily entangled because Shibuta is silent to any disentanglement and silent as to any motivation for doing so. Therefore, because Shibuta’s and Applicant’s compositions have different structures, they cannot be said to have similar properties. At any rate, Shibuta does not disclose or suggest any relationship between carbon nanotubes and alignment as recited in Applicant’s claims.

Further still, none of the Examiner’s comments in the Office Action are directed to Applicant’s “claimed” invention. No connection whatsoever is made between orientation, alignment or aspect ratio of the nanotubes themselves with any disclosures in Smalley or Shibuta.

Thus, Applicant again respectfully requests that this rejection be withdrawn.

IV. Request for New Examiner. The Examiner's comments in the Office Actions have been unclear and the rejections appear to be based on a basic lack of understanding of the claims. Applicant again respectfully requests that a new examiner be assigned to this application.

V. Conclusion. Applicant respectfully requests that all rejections of record be withdrawn and the prompt issuance of a Notice of Allowance. In the alternative, should the rejections not be withdrawn, Applicant respectfully requests that the application be fully and properly examined. Applicant is entitled to be provided with clear and reasonable issues on which to respond or for the purpose of proceeding with the Appeal.

Date: August 2, 2007

Respectfully submitted,
Novak Druce & Quigg LLP

By: _____

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